



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,139	10/06/2003	Shunpei Yamazaki	740756-2659	9428
22204	7590	06/14/2007	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128				WILCZEWSKI, MARY A
ART UNIT		PAPER NUMBER		
2822				
			MAIL DATE	DELIVERY MODE
			06/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/678,139	YAMAZAKI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	M. Wilczewski	2822	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 June 2006 and 29 March 2006.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 7-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 7,8,10-13,15-18,20-23,25,26,28-33,35 and 37 is/are rejected.
- 7) Claim(s) 9,14,19,24,27,34 and 36 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 October 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. 08/536,977.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 25 October 2006.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

This Office action is in response to the Supplemental Declaration filed on June 6, 2006, and the Terminal Disclaimer filed March 29, 2006. Claims 7-37 are pending in this reissue application.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 7, 8, 10-13, 15-18, 20-23, 25, 26, and 29-33 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 6, 7, 11, 12, 16, and 17 of U.S. Patent No. 6,489,189. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claims are generic to the patented claims. Both sets of claims recite a method for

manufacturing a semiconductor device in which an amorphous semiconductor film is crystallized using a metal element. The pending claims then recite the formation of a metal element diffusion film over the crystallized semiconductor film. Claims 8, 13, 18, and 23 recite that the metal element diffusion film is an amorphous silicon film. Claims 10, 15, 20, and 25 recite that the metal element diffusion film is an amorphous  $\text{Si}_x\text{Ge}_{1-x}$  film. The patented claims recite the formation of an amorphous silicon film or an amorphous silicon-germanium film on the crystalline semiconductor film. Hence, the method recited in the present claims clearly encompasses the method of the patented claims.

Claims 7, 8, 11-13, 16-18, 21, and 29-31 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,991,976. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claims are generic to the patented claims. Both sets of claims recite a method for manufacturing a semiconductor device in which an amorphous semiconductor film is crystallized using a metal element. The pending claims then recite the formation of a metal element diffusion film over the crystallized semiconductor film; claim 8 recites that the metal element diffusion film is an amorphous silicon film. The patented claims recite the formation of a second film comprising amorphous silicon over the crystallized semiconductor film. Hence, the method recited in the present claims clearly encompasses the method of the patented claims.

Claims 7, 8, 11-13, 16-18, 21-23, 26, 28-33, 35, and 37 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 6, 7, 11-13, 17-19, 23, 24, and 28 of copending Application No. 11/322,653 (Publication No. US 2006/0148218). Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claims are generic to the patented claims. Both sets of claims recite a method for manufacturing a semiconductor device in which an amorphous semiconductor film is crystallized using a metal element. The pending claims then recite the formation of a metal element diffusion film over the crystallized semiconductor film; claim 8 recites that the metal element diffusion film is an amorphous silicon film. The patented claims recite the formation of a second film comprising amorphous silicon over the crystallized semiconductor film. Hence, the method recited in the present claims clearly encompasses the method of the patented claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Terminal Disclaimer***

The terminal disclaimer filed on March 29, 2006, disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patents 6,048,758; 6,331,457; and 6,686,262 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Oath/Declaration***

The Supplemental Declaration for Reissue Patent Application to Correct "Errors" Statement (37 C.F.R. 1.175) filed June 9, 2006, is acknowledged.

***Allowable Subject Matter***

Claims 9, 14, 19, 24, 27, 34, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Wilczewski whose telephone number is (571) 272-1849. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith can be reached on 571-272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



M. Wilczewski  
Primary Examiner  
Tech Center 2800